IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Onur G. Guleryuz   Group Art Unit: Not Yet Assigned

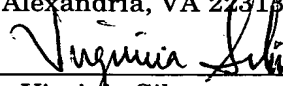Serial No.:   Unknown   Examiner: Not Yet Assigned

Filed: Herewith

Title: Weighted Overcomplete De-noising

CERTIFICATION UNDER 37 CFR 1.10

"Express Mail" Mailing Label Number: EV311302084US

    I hereby certify that this Information Disclosure Statement, and the documents referred to as enclosed therein are being deposited with the United States Postal Service in an envelope as "Express Mail Post Office to Addressee" under 37 CFR 1.10 on the date indicated below and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450".

Dated: February 13, 2004

_____
Virginia Silva

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

    In compliance with the duty of disclosure under 37 C.F.R. §1.56, and in accordance with the practice under 37 C.F.R. §1.97 and §1.98, the Examiner's attention is directed to the document(s) listed on the enclosed Form PTO-1449. A copy of each listed document is enclosed, except, in the case where this application is filed after June 30, 2003, copies of any U.S. patents and U.S. patent application publications are not enclosed.
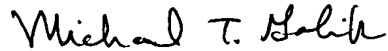
    This Information Disclosure Statement is being filed within three months of the U.S. filing date or before the mailing date of a first Office Action on the merits. No statement or fee is required (37 CFR §1.97(b)).

CONCLUSION

    The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any over-payment to Deposit Account No.: 19-2746.

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be initialed and returned indicating that such information has been considered.

Respectfully submitted,

Michael T. Gabrik
Registration No. 32,896

Please address all correspondence to:

Epson Research and Development, Inc.
Intellectual Property Department
150 River Oaks Parkway, Suite 225
San Jose, CA 95134
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Date: February 13, 2004

Form PTO-1449	DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	SERIAL NO. Unknown	ATTY DOCKET NO. AP183HO
		APPLICANT Onur G. Guleryuz	
INFORMATION DISCLOSURE CITATION (USE SEVERAL SHEETS IF NECESSARY) PAGE 1 OF 2		FILING DATE Herewith	GROUP Not Yet Assigned

U.S. PATENT DOCUMENTS

E.I.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA	2003/0086623	5/8/03	Berkner, et al.			
	AB	6,496,604	12/17/02	Bricourt			
	AC	6,311,297	10/30/01	Kondo, et al.			
	AD	6,263,108	7/17/01	Kondo, et al.			
	AE	6,163,868	12/19/00	Kondo, et al.			
	AF	5,936,674	8/10/99	Kim			
	AG	5,912,707	6/15/99	Kim			
	AH	5,841,477	11/24/98	Kim			
	AI	5,751,361	5/12/98	Kim			
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

E.I.		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
	AL	WO 02/096118	11/28/02	PCT			

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	AM	"Translation-Invariant De-Noising", R.R. Coifman and D.L. Donoho, Yale University and Stanford University, pp. 1-26
	AN	"Ideal Spatial Adaptation by Wavelet Shrinkage", David L. Donoho, Iain M. Johnstone, Dept. of Statistics, Stanford University, Stanford CA, June 1992, Revised April 1993, pp. 1-30
	AO	"Error Resilient Video Coding Techniques", Real-Time Video Communications over Unreliable Networks, Yao Wang, et al., *IEEE Signal Processing Magazine,* July 2000, pp.61-82
	AP	"A Dual-Tree Complex Wavelet Transform with Improved Orthogonality and Symmetry Properties", Nick Kingsbury, Signal Processing Group, Dept. of Engineering, University of Cambridge, Cambridge UK
	AQ	"On the Importance of Combining Wavelet-Based Nonlinear Approximation with Coding Strategies", Albert Cohen, et al., *IEEE Transactions on Information Theory, Vol. 48, No. 7, July 2002, pp 1895-1921*
	AR	"Concealment of Damaged Block Transform Coded Images Using Projections onto Convex Sets", Huifang Sun, et al., *IEEE Transactions on Image Processing, Vol. 4, No. 4, April 1995, pp. 470-477*

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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APPLICANT(S) Onur G. Guleryuz

FILING DATE Herewith | GROUP Not Yet Assigned

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	AA1	"Spatially Adaptive Image Denoising Under Overcomplete Expansion", Xin Li and Michael T. Orchard, Department of Electrical Engineering, Princeton University, *IEEE 2000*, pp. 300-303
	AB1	"Spatially Adaptive Wavelet Thresholding with Context Modeling for Image Denoising, S. Grace Chang, et al., *IEEE Transactions on Image Processing, Vol. 9, No. 9, September 2000*, pp.1522-1531
	AC1	"Error Control and Concealment for Video Communication: A Review", Yao Wang and Qin-Fan Zhu, *Proceedings of the IEEE, Vol. 86, No. 5, May 1998*, pp. 974-997
	AD1	"De-Noising by Soft-Thresholding", David L. Donoho, *IEEE Transactions on Information Theory, Vol. 41, No. 3, May 1995*, pp. 613-627
	AE1	"Analysis of Multiresolution Image Denoising Schemes Using Generalized Gaussian and Complexity Priors", Pierre Moulin and Juan Liu, *IEEE Transactions of Information Theory, Vol. 45, No. 3, April 1999*, pp. 909-919
	AF1	"Interpolation of Missing Data in Image Sequences", Anil C. Kokaram, et al., *IEEE Transactions of Image Processing, Vol. 4, No. 11, November 1995*, pp. 1509-1519
	AG1	"Information Loss Recovery for Block-Based Image Coding Techniques-A Fuzzy Logic Approach", Xiaobing Lee, et al., *IEEE Transactions on Image Processing, Vol. 4, No. 3, March 1995*, pp. 259-273
	AH1	"DCT Coefficients Recovery-Based Error Concealment Technique and Its Application to the MPEG-2 Bit Stream Error", Jong Wook Park, et al., *IEEE Transactions on Circuits and Systems for Video Technology, Vol. 7, No. 6, December 1997*, pp. 845-854
	AI1	"A Parametric Texture Model Based on Joint Statistics of Complex Wavelet Coefficients", Javier Portilla and Eero P. Simoncelli, Center for Neural Science, and Courant Institute of Mathematical Sciences, New York University, New York, NY, International Journal of Computer Vision 40(1), pp. 49-71, 2000
	AJ1	"Filling-In by Joint Interpolation of Vector Fields and Gray Levels", Coloma Ballester, et al. *IEEE Transactions on Image Processing, Vol. 10, No. 8, August 2001*, pp. 1200-1211
	AK1	"Nonlinear approximation", Ronald A. DeVore, Department of Mathematics, University of South Carolina, Columbia, SC, *Cambridge University Press, 1998, PP. 51-150*
	AL1	"Errorless Restoration Algorithms for Band-Limited Images", Paulo Jorge S. G. Ferreira and Armando J. Pinho, *IEEE*, 1994, pp. 157-161
	AM1	"Transform Coded Image Reconstruction Exploiting Interblock Correlation, Sheila S. Hemami and Teresa H.-Y. Meng, *IEEE Transactions on Image Processing, Vol. 4, No. 7, July 1995*, pp. 1023-1027
	AN1	"Combining Frequency and Spatial Domain Information for Fast Interactive Image Noise Removal", Anil N. Hirani, Takashi Totsuka, Sony Corporation,
	AO1	"Reconstruction of Baseline JPEG Coded Images in Error Prone Environments", Shahram Shirani, et al., *IEEE Transactions on Image Processing, Vol. 9, No. 7, July 2000*, pp. 1292-1299
	AP1	"Fast DCT-Based Spatial Domain Interpolation of Blocks in Images", Ziad Alkachouh and Maurice G. Bellanger, *IEEE Transactions on Image Processing, Vol. 9, No. 4, April 2000*, pp. 729-732

EXAMINER	DATE CONSIDERED

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